



Beyond Elegance

## **MINI**CENTRAL

A new innovation from Carrier



Residential



Commercial



Hotels



Nothing Beats Experience .. Nothing Beats Life With Carrier



# MINI CENTRAL 53CCD Series

## Technical Specifications

### HEAT PUMP

| Size | Cooling  |       |       |      |        |      | Heating  |       |       |      |            |
|------|----------|-------|-------|------|--------|------|----------|-------|-------|------|------------|
|      | Capacity |       | Input |      | EER    |      | Capacity |       | Input |      | COP<br>W/W |
|      | Btu/hr   | W     | W     | A    | Btu/hr | W/W  | Btu/hr   | W     | W     | A    |            |
|      |          |       |       |      |        |      |          |       |       |      |            |
| 20   | 20000    | 5862  | 1915  | 9.2  | 10.44  | 3.06 | 18750    | 5495  | 1575  | 7.5  | 3.49       |
| 28   | 25800    | 7561  | 2520  | 12.3 | 10.24  | 3.00 | 25000    | 7327  | 2265  | 10.9 | 3.23       |
| 32   | 30700    | 8998  | 3080  | 15.7 | 9.97   | 2.92 | 26000    | 7620  | 2885  | 13.5 | 2.64       |
| 39   | 39500    | 11577 | 4020  | 19.5 | 9.82   | 2.88 | 33200    | 9730  | 3260  | 15.8 | 2.98       |
| 48   | 48000    | 14068 | 3955  | 9.5  | 12.14  | 3.56 | 42000    | 12309 | 3815  | 7.4  | 3.22       |
| 60   | 58000    | 16999 | 5100  | 11.2 | 11.37  | 3.33 | 52000    | 15240 | 4910  | 10.7 | 3.10       |

### COOL ONLY

| Cooling Capacity |       | Cooling Input |      | EER    |      |
|------------------|-------|---------------|------|--------|------|
| Btu/hr           | W     | W             | A    | Btu/hr | W/W  |
| 20000            | 5862  | 1915          | 9.2  | 10.44  | 3.06 |
| 25800            | 7561  | 2520          | 12.3 | 10.24  | 3.00 |
| 30700            | 8998  | 3080          | 15.7 | 9.97   | 2.92 |
| 39500            | 11577 | 4020          | 19.5 | 9.82   | 2.88 |
| 49500            | 14508 | 3970          | 9.2  | 12.47  | 3.65 |
| 57500            | 16852 | 5045          | 10.9 | 11.4   | 3.34 |

|                                          |            |                        |                        |                        |                        |                        |                        |                        |
|------------------------------------------|------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| System Model                             |            | Heat Pump<br>Cool Only | 53CCD20-H<br>53CCD20-C | 53CCD28-H<br>53CCD28-C | 53CCD32-H<br>53CCD32-C | 53CCD39-H<br>53CCD39-C | 53CCD48-H<br>53CCD48-C | 53CCD60-H<br>53CCD60-C |
| Indoor Unit Model                        |            | Heat Pump<br>Cool Only | 42CCD20-H<br>42CCD20-C | 42CCD28-H<br>42CCD28-C | 42CCD32-H<br>42CCD32-C | 42CCD39-H<br>42CCD39-C | 42CCD48-H<br>42CCD48-C | 42CCD60-H<br>42CCD60-C |
| Outdoor Unit Model                       |            | Heat Pump<br>Cool Only | 38CCD20-H<br>38CCD20-C | 38CCD28-H<br>38CCD28-C | 38CCD32-H<br>38CCD32-C | 38CCD39-H<br>38CCD39-C | 38CCD48-H<br>38CCD48-C | 38CCD60-H<br>38CCD60-C |
| Power Supply                             | Indoor     | V/PH/HZ                | 200-240/1/50           |                        |                        |                        |                        |                        |
|                                          | Outdoor    |                        | 200-240/1/50           |                        |                        |                        | 380-420/3/50           |                        |
| Refrigerant Type/Connection Type         |            |                        | R22 / Flare            |                        |                        |                        |                        |                        |
| Refrigerant<br>Lines                     | Suction OD | Inch                   | 5/8                    | 5/8                    | 5/8                    | 3/4                    | 3/4                    | 7/8                    |
|                                          | Liquid OD  | Inch                   | 3/8                    | 3/8                    | 3/8                    | 3/8                    | 1/2                    | 1/2                    |
| INDOOR UNIT                              |            |                        |                        |                        |                        |                        |                        |                        |
| Dehumidification                         |            | L / h                  | 2.5                    | 3.2                    | 4                      | 4.5                    | 5.6                    | 6.8                    |
| Air Flow rate<br>(At 0 ESP & High speed) |            | c.f.m                  | 650                    | 675                    | 720                    | 1025                   | 1200                   | 1340                   |
|                                          |            | m³/hr                  | 1102                   | 1144                   | 1220                   | 1737                   | 2034                   | 2271                   |
| Sound Pressure (H / M / L)               |            | dBa                    | 57 / 53 / 43           | 57 / 51 / 48           | 58 / 56 / 54           | 60 / 57 / 54           | 59 / 57 / 53           | 60 / 57 / 55           |
| Net<br>Dimensions                        | Width      | mm                     | 1000                   | 1000                   | 1210                   | 1420                   | 1420                   | 1630                   |
|                                          | Height     | mm                     | 270                    | 270                    | 270                    | 270                    | 370                    | 370                    |
|                                          | Depth      | mm                     | 590                    | 590                    | 590                    | 590                    | 590                    | 590                    |
| Net Weight                               |            | Kg                     | 26                     | 28                     | 30                     | 35                     | 49                     | 56                     |
| Drain Hose (Inner Diameter)              |            | Inch                   | 5/8                    | 5/8                    | 5/8                    | 5/8                    | 5/8                    | 5/8                    |
| OUTDOOR UNIT                             |            |                        |                        |                        |                        |                        |                        |                        |
| Net<br>Dimensions                        | Width      | mm                     | 860                    | 860                    | 860                    | 860                    | 860                    | 860                    |
|                                          | Height     | mm                     | 575                    | 575                    | 575                    | 720                    | 1150                   | 1150                   |
|                                          | Depth      | mm                     | 350                    | 350                    | 350                    | 350                    | 350                    | 350                    |
| Net Weight                               |            | Kg                     | 52.8                   | 58.5                   | 62.4                   | 79.5                   | 90                     | 92                     |

- Cooling Capacity, Dehumidification and Energy Efficiency Ratio (EER) are based on ISO 5151 Standards:  
26.6/19.4 °C db/wb Indoor Temperature. 35°C db Outdoor Temperature. High Air Flow  
220 volts power supply (for sizes 20-28-39) 380 volts power supply (for sizes 48-60)
- Heating Capacity and Coefficient Of Performance (COP) are based on ISO 5151 Standards:  
20°C db Indoor Temperature. 7/6°C db/wb Outdoor Temperature. High Air Flow  
220 volts power supply (for sizes 20-28-39) 380 volts power supply (for sizes 48-60)

Specifications are subject to change without notice according to Carrier Policy of continuous development.



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# Airflow Versus Static Pressure Performance

42CCD20

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 650                      | 1102 | 595  | 1008 | 540  | 915  | 465  | 788  | 385  | 652  | 305  | 517  | 225  | 381  |
| Medium    | 560                      | 949  | 505  | 856  | 450  | 763  | 370  | 627  | 295  | 500  | 225  | 381  |      |      |
| Low       | 360                      | 610  | 310  | 525  | 250  | 424  | 170  | 288  |      |      |      |      |      |      |

42CCD28

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 675                      | 1144 | 620  | 1051 | 570  | 966  | 485  | 822  | 405  | 686  | 330  | 559  | 260  | 441  |
| Medium    | 570                      | 966  | 520  | 881  | 440  | 746  | 390  | 661  | 310  | 525  | 245  | 415  | 180  | 305  |
| Low       | 490                      | 830  | 435  | 737  | 395  | 669  | 340  | 576  | 265  | 449  | 190  | 322  |      |      |

42CCD32

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 720                      | 1220 | 680  | 1153 | 625  | 1059 | 575  | 975  | 530  | 898  | 485  | 822  | 440  | 746  |
| Medium    | 580                      | 983  | 535  | 907  | 495  | 839  | 450  | 763  | 410  | 695  | 340  | 576  | 280  | 475  |
| Low       | 470                      | 797  | 430  | 729  | 380  | 644  | 350  | 593  | 290  | 491  | 225  | 381  |      |      |

42CCD39

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 1030                     | 1746 | 950  | 1610 | 850  | 1441 | 750  | 1271 | 655  | 1110 | 560  | 949  | 465  | 788  |
| Medium    | 890                      | 1508 | 795  | 1347 | 700  | 1186 | 595  | 1008 | 490  | 830  | 390  | 661  | 295  | 500  |
| Low       | 710                      | 1203 | 620  | 1051 | 530  | 898  | 425  | 720  | 325  | 551  | 240  | 407  |      |      |

42CCD48

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 1200                     | 2034 | 1135 | 1924 | 1065 | 1805 | 955  | 1619 | 840  | 1424 | 725  | 1229 | 610  | 1034 |
| Medium    | 1045                     | 1771 | 980  | 1661 | 915  | 1551 | 815  | 1381 | 710  | 1203 | 605  | 1025 | 500  | 847  |
| Low       | 850                      | 1441 | 780  | 1322 | 705  | 1195 | 605  | 1025 | 505  | 856  | 405  | 686  | 305  | 517  |

42CCD60

| Fan Speed | External Static Pressure |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | in.W                     | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   | in.W | Pa   |
|           | 0                        | 0    | 0.05 | 12.5 | 0.10 | 25   | 0.15 | 37.5 | 0.20 | 50   | 0.25 | 62.5 | 0.30 | 75   |
|           | cfm                      | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h | cfm  | m³/h |
| High      | 1340                     | 2271 | 1270 | 2153 | 1190 | 2017 | 1110 | 1881 | 1005 | 1703 | 850  | 1441 | 665  | 1127 |
| Medium    | 1120                     | 1898 | 1070 | 1814 | 1005 | 1703 | 930  | 1576 | 820  | 1390 | 680  | 1153 | 525  | 890  |
| Low       | 970                      | 1644 | 920  | 1559 | 850  | 1441 | 775  | 1314 | 660  | 1119 | 540  | 915  | 390  | 661  |







## **MINI**CENTRAL

### **F e a t u r e s**

#### **Super Control and Safety Protections**

- Standard factory supplied room controller to be mounted on the wall.
- Optional wireless remote control used with standard room controller
- Auto restart feature.
- 3 (Three) minutes time delay for compressor.
- 90 seconds minimum operation time for compressor to allow sufficient time for oil to return to the compressor.
- Dry mode reduces humidity by computerized dehumidification.
- Sleep function provides healthy sleep environment with energy saving.
- ON Timer Function
- OFF Timer Function
- Key lock mode to prevent change of operation settings.
- Frost prevention of indoor coil when the system is operating in cool mode.
- Defrost protection of outdoor coil when the system is operating in heat mode.
- Cold draft protection when the system is operating in heat mode to prevent cold air from blowing into the space to be air-conditioned.

#### **Super Compact Technology**

- Compact indoor unit for easy installation above false ceiling.
- Compact outdoor unit.

#### **Super Efficient and Tropical with Minimum Energy Consumption**

- Innovative Carrier Heat Transfer and Aerodynamics Technology with efficient compressor and coils leading to Hi-Tech. AMS (Air Management System).

#### **Super Quiet**

- Newly designed sound minimized air management system provides noise-free operation.
- Carrier uneven aerofoil fan and propeller fan technologies for smooth air flow and quiet operation.

#### **Reliability**

- Standard galvanized sheet metal casing protects against rust.
- Polyester powder coated drain pan for extra rust protection.

#### **Super Easy Installation**

- Standard return air plenum complete with air filters.
- Field interchangeable piping connections from right to left hand side to suit various applications.

#### **Super Easy Service & Maintenance**

- Integral high-pitched V-shaped drain pan minimizes wet surface and residual water during off cycles and inhibits the growth of bacteria that may cause smells.
- Self-diagnostics to determine malfunctions due to incorrect installation or abnormal use.
- Easy access to components.

#### **Extra Super safety protections**

- Thermistor to protect the compressor against refrigerant leak.
- Crankcase heater to guard the compressor against flood back conditions and to eliminate oil fluffing on start up (only for sizes 48-60).
- Internal overloads for compressor and motor(s).
- External sensitive quick trip overload to protect the compressor against excessive current (only for sizes 48-60).

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